R. L. PARTRIDGE.

Improvement in Bridges.

No. 127,791. Patented June 11, 1872.

Fig. 1

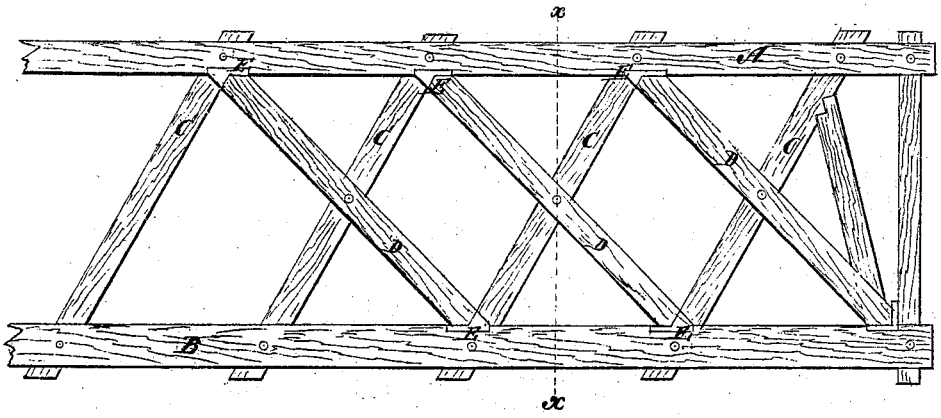


Fig. 2

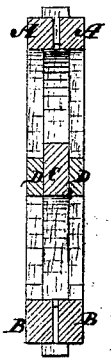


Fig. 3

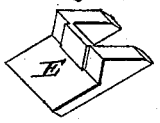


Fig. 4

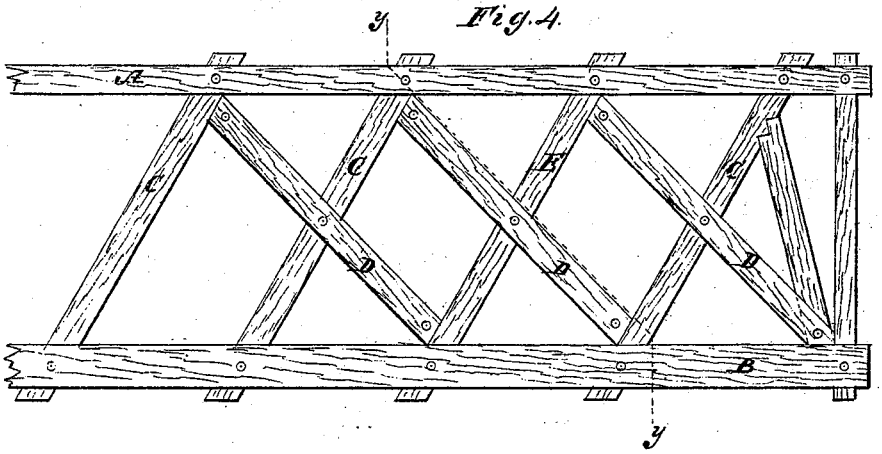
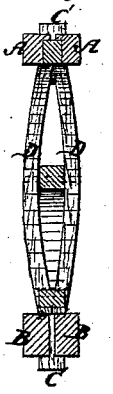


Fig. 5



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UNITED STATES PATENT OFFICE.

REUBEN L. PARTRIDGE, OF MARYSVILLE, OHIO.

IMPROVEMENT IN BRIDGES.

Specification forming part of Letters Patent No. 127,791, dated June 11, 1872.

To all whom it may concern:

Be it known that I, REUBEN L. PARTRIDGE, of Marysville, in the county of Union and State of Ohio, have invented a new and useful Improvement in Bridges; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved bridge. Fig. 2 is a vertical cross-section of the same taken through the line *x x*, Fig. 1. Fig. 3 is a detail perspective view of one of the iron foot-pieces. Fig. 4 is a side view of a modification of my improved bridge. Fig. 5 is a detail cross-section of the same taken through the line *y y*, Fig. 4.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved bridge, simple in construction, light, and strong; and it consists in the construction and combination of various parts of the bridge, as hereinafter more fully described.

A is the upper and B is the lower chord, which chords are made in two sections, as shown in Figs. 2 and 5. C are the ties or posts, the ends of which are securely bolted to and between the sections of the chords A B, and which stand at an angle of sixty degrees (60°) with the horizontal plane. The ties or posts C all stand in line and in the same line of chords. D are the main braces, which are arranged in pairs, and stand at an angle of forty-five degrees with the horizontal plane. The two braces of each pair are parallel with each other, pass upon opposite sides of the ties or posts C, and are bolted at their middle parts to the middle part of the said ties or posts C. The ends of the braces D rest against the iron foot-pieces E, which are interposed between the ends of the said braces D and the ties C and chords A B, as shown in Fig. 1. The sides of the foot-pieces E are flanged or made angling, so that the ends of the braces D may rest squarely against them, and their rear sides are notched to fit upon the ties or posts C, as shown in Figs. 1 and 3. The foot-pieces E may be made in one or two pieces, as may be desired or convenient. In the modification shown in Figs. 4 and 5, which is designed for cheaper and lighter structures, the iron foot-pieces are omitted and the ends of the braces D are sprung together and bolted to each other, so that their ends may rest against the single ties or posts C and chords A B, as shown in Figs. 4 and 5.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The upper and lower chords A B (each made in two sections,) the single ties C (placed at an angle of sixty degrees thereto) and the double braces D D, (placed at an angle of forty-five degrees to the chords,) arranged on each side of the ties, when combined as described, for the purpose specified.

2. The bifurcated, shouldered, and end-angled shoe E, when combined as described with the braces D, ties C, and chords A B, for the purpose specified.

REUBEN L. PARTRIDGE.

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